

RULES FOR CHECKING

THE SPREAD OF

CONTAGIOUS

OR

INFECTIOUS DISEASES:

SCARLET FEVER,

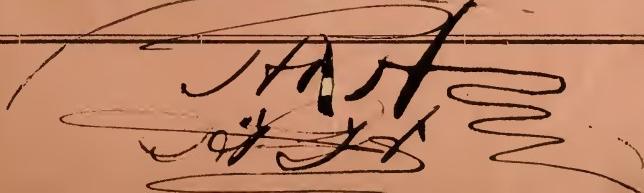
DIPHTHERIA, SMALL-POX, CHOLERA, ETC.

(*Pamphlet No. 15.*)

ISSUED BY THE PROVINCIAL BOARD OF HEALTH.

TORONTO:

PRINTED BY WARWICK & SONS, 26 AND 28 FRONT STREET WEST.





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RULES FOR CHECKING THE SPREAD OF CONTAGIOUS OR INFECTIOUS DISEASES:

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DIPHTHERIA, SMALL-POX, CHOLERA, ETC.

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RULES FOR CHECKING THE SPREAD Contagious or Infectious Diseases:

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(PAMPHLET No. 15.)

(Issued by the Provincial Board of Health.)

These diseases are spread by means of minute living organisms transmitted directly or indirectly from person to person, and can be prevented if care and systematic means are taken to destroy these disease germs while yet limited to the sick-room.

The parts of the body which are the breeding places of the contagious organisms give them off in the greatest amount. These parts are :—

- In Scarlet Fever, the mouth, throat, nasal passages and skin.
- “ Diphtheria, the mouth, throat and nasal passages.
- “ Small-pox, the pustules, chiefly of the skin.
- “ Measles, the skin and air passages.
- “ Whooping Cough, the air passages.
- “ Typhoid Fever and Cholera, the discharges from the bowels.

The particles given off from the body, and containing these organisms may pass into the air, or find their way into water or food, and

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so be introduced into the system by breathing, drinking or eating, or through abraded surfaces.

The first five diseases in the above enumeration are very commonly disseminated by means of the atmosphere. The special contagia of these five remain virulent for a great length of time, and may be carried a considerable distance by the air without losing their activity; Typhoid and Cholera, while sometimes communicated by the air, are peculiarly liable to be transmitted by means of water. The two last named diseases, as well as Scarlet Fever and Diphtheria, may be communicated by means of milk or other articles of food.

PRECAUTIONS TO BE TAKEN BY PRIVATE INDIVIDUALS.

1. When anybody, especially a child or young person, has sore throat, discharges from the nose or eyes, bad breath and fever, he should be kept separated from all persons except necessary attendants, until it be ascertained whether he has Diphtheria, Scarlet Fever, Small-pox, Measles, or any other communicable disease. Should a case of Diphtheria occur in a house or neighbourhood, children in that locality should be frequently examined for the purpose of ascertaining if they present any of the above symptoms.
2. Every case of Small-pox, Diphtheria, Scarlet Fever, Typhoid Fever or Cholera should be at once reported to the Local Board or its Medical Health Officer, in compliance with the following clauses of the Public Health Act, 1884 :

Whenever any **householder** knows that any person within his family or household has the Small-pox, Diphtheria, Scarlet Fever, Cholera, or Typhoid Fever, he shall within twenty-four hours give notice thereof to the Local Board of Health, or to the Medical Health Officer of the district in which he resides, and such notice shall be given either at the office of the Medical Health Officer, or by a communication addressed to him and duly mailed within the time above specified, and in case there is no Medical

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Health Officer then to the Secretary of the Local Board of Health either at his office or by communication as aforesaid. (Cap. 38, sec. 46, 1884.)

Whenever any physician knows that any person whom he is called upon to visit is infected with Small-pox, Scarlet Fever, Diphtheria, Typhoid Fever, or Cholera, such physician shall within twenty-four hours give notice thereof to the Local Board of Health, or Medical Health Officer of the municipality in which such diseased person is, and in such manner as is directed by rules 2 and 3 of section 17 of Schedule A. (Cap. 38, sec. 49, 1884.)

3. The cleaning and disinfection of privies should, at all times, be carefully attended to. All pits which have not been emptied during the present year should at once be thoroughly disinfected by the addition of a sufficient quantity of a solution of mercuric chloride (corrosive sublimate, strength, 1-500), and then emptied ; and all privy pits should be disinfected at least twice a week by the above process, or by the addition of wood or coal ashes. Whatever garbage is capable of being burned should be so treated, and all that cannot be so dealt with should be frequently removed.

4. Each individual must look closely to his water supply. If from a private source, regarding the purity of which he is not quite certain, he should have the water analyzed. Great care should be exercised by persons in partaking of water from outside sources, regarding which they have no knowledge. If filters be in use, they should be cleansed and the filtering material renewed.

5. Similar care should be exercised regarding ice and milk supply ; also not to partake of unripe, half-decayed or indigestible vegetables and fruit. Should Cholera appear in our midst, these precautions must be more rigidly observed, and should extend to other articles of food and drink.

6. It should be borne in mind that the contagia of Typhoid Fever and Cholera are contained principally in the discharges from the bowels, and may be conveyed by contamination (from these discharges) of water, food or air. They may find their way into wells and cisterns ; may be

carried into the air from discharges not disinfected, or from the washings of clothing thrown upon the ground, into closets, or into badly trapped and ill-ventilated drains ; or may adhere to walls, clothing or other articles.

7. The greatest care should be taken to guard against these various avenues of approach, and the utmost cleanliness should be observed. In outbuildings, sheds, etc., lime-wash and other disinfectants should be freely used. Those suited to special circumstances will be found in Section 20 of this pamphlet.

8. Great attention should be paid to the proper trapping and ventilation of waste-pipes and all the connections of house drains, to the flushing of sewers and to all the other precautions referred to in Pamphlet No. 11 issued by this Board.

9. Persons should avoid all exposure, direct or indirect, to special contagion ; and no person or thing should be allowed to come direct from a case of infectious disease, unless previously disinfected under competent supervision. After visiting such a case, a person should bathe himself, especially his hands, face and hair, in a disinfectant, and should change and disinfect his clothing. The passages from any person sick with Typhoid Fever or Cholera should not be allowed to be placed, without previous disinfection, in water-closets or privies, but should be attended to as in Sec. 20. Persons should not ride in any vehicle which has been employed in the conveyance of an infected person, unless it has been subsequently disinfected. They should not wear nor handle clothing worn by a person during sickness, or convalescence from these diseases, nor drink from the same cup, nor put into the mouth anything used by any such person.

10. Great care should be exercised as to clothing, bedding, carpets, curtains, upholstered goods, and other articles which may have been exposed to and retain infection. None of these articles should be purchased at second-hand unless the purchaser is satisfied that they have been properly disinfected in accordance with the rules laid down in Sec. 20 ; and individuals will have to be vigilant as to receiving articles from

infected houses, unless efficient precaution has been taken by the Local Board of Health so as to prevent the transmission of disease from infected localities by regulations in accordance with the provisions of the Public Health Act of 1884, and the directions given below to municipal authorities.

11. During Cholera epidemics it is of great importance to notice and carefully attend to cases of Diarrhoea, which at other times might not be thought of much consequence; and valuable time should not be lost in depending upon the numberless "sure cures" which are so extensively advertised. Any person who may be subject to derangement of the intestinal tract should wear a flannel bandage. Unnecessary exposure to damp and cold, over-fatigue and undue irregularity in regard to meals should be avoided, as also excesses in eating and drinking.

MANAGEMENT OF THE SICK ROOM, AND DUTIES OF ATTENDANTS.

12. The sick-room, in cases of infectious disease, should always be in an upper storey, if there is more than one storey. It should be large, having an air space of at least 1,000 cubic feet for each individual, and the air of the room should be frequently changed—at least three times per head per hour. In summer the supply should be unlimited; windows being thrown open, and draughts on the patient prevented, some device being employed, if necessary, such as a fine gauze or wire netting, slanting from the top of the sash to within two inches of the ceiling. If there be a fire place or any flues they should be utilized for purposes of ventilation. The room should be cleared of all needless clothing, carpets, stuffed furniture, drapery, or other material liable to harbour the germs of disease. Inexpensive bedding should be used and destroyed on the termination of the case; but if feather beds, feather pillows, down quilts,

or hair mattresses are used, every pains should be taken to thoroughly disinfect them by opening their covers, removing the contents and exposing them to the fumes of chlorine, or of sulphurous acid, or to intense heat.

13. In cases of contagious disease, especially of Typhoid Fever, Cholera and Scarlet Fever, the discharges from the kidneys and bowels should be passed into vessels containing enough of a disinfectant solution to cover them. After remaining for at least an hour in the solution the discharges should be buried in such a location as not to contaminate any well or other source of water supply.

14. All soiled clothing and bedding should be immediately changed and disposed of by being placed at once in a tub containing a suitable disinfectant solution. (See Sec. 20.) They should be left in the solution for twenty-four hours, then rinsed in clear water and washed. Clothing which has not been soiled may be treated in the same manner ; or, better still, when practicable, by the agency of heat. A brick oven or portable furnace will answer the purpose, the clothes to be disinfected being hung on wires. (See Sec. 20.)

15. The room should be carefully dusted and the floor swept, the latter being previously sprinkled over with wet sand, saw dust, tea leaves or other suitable material. When sweeping is completed the refuse should be deposited in the centre of the fire.

16. Nurses and attendants should be required to keep themselves and their patients as clean as possible, disinfecting their hands frequently by a solution of one part of carbolic acid in two of glycerine and forty of water, or by a solution of chlorinated soda (1 to 10). Attendants should also wear rubber, cotton or linen (not woollen) clothes or overalls, to which particles will not readily adhere, and which may be easily disinfected.

17. When convalescence has taken place the patient should be bathed, should put on clean clothes, and be placed in a room distant from the sick room, before joining the other members of the household.

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LENGTH OF DIFFERENT PERIODS IN THE HISTORY OF INFECTIOUS
DISEASES AS GIVEN BY DR. VACHER, BIRKENHEAD.

DISEASES.	Time from inception to beginning of Eruption.	Time from final precursory symptoms to beginning of Eruption.	Time from beginning of Eruption to cessation of pyrexia.	Time from beginning of Eruption till patient ceases to be infective.
Small-pox	13 days. Range 7 to 21 days.	2 days. Range a few hours to 7 days.	14 days.	56 days.
Varioloid or Modified Small pox.	13 days. Range 7 to 21 days.	2 days. Range a few hours to 7 days.	14 days.	35 days.
Chicken-pox....	13 days. Range 4 to 17 days.	2 days. Range a few hours to 3 days.	5 days. Range 3 to 7.	17 days.
Measles	14 days. Range 7 to 21 days.	4 days. Range 1 to 9 days.	6 days.	27 days.
German Measles.	14 days. Range 10 to 20 days.	1 day. Range <i>nil</i> to 3 days	7 days.	14 days.
Scarlatina or Scarlet Fever.	4 days. Range a few hours to 14 days.	1 day.	7 days.	49 days.
Diphtheria	5 days. Range 1 to 14 days.	2 days. Range a few hours to 4 days.	14 days.	28 days.
Idiopathic Erysipelas.	5 days. Range 2 to 14 days.	1 day.	14 days.	35 days.
Typhus Fever ..	14 days. Range a few hours to 25 days.	7 days. Range 3 to 7 days.	7 days.	21 days.
Typhoid or Enteric Fever.	21 days. Range 1 to 28 days.	7 days. Range 7 to 12 days	21 days. Range 14 to 23	28 days.
Mumps	18 days. Range 3 to 25 days.	4 days.	7 days.	21 days.

* In Scarlet Fever the common period of incubation is from 24 to 48 hours—occasionally longer lasting from three to five days. In rare instances the incubatory period is practically absent, the symptoms following quickly upon exposure to infection. Any susceptible person who has been exposed to infection should before being pronounced safe from its probable consequences be kept under surveillance for a week, and then only be set at liberty after change of clothes and baths. It is an error to regard the infective process at an end before the cessation of desquamation and for some considerable interval thereafter. The tendency to albuminuria ought always to be remembered and guarded against. The isolation of scarlet fever patients for a period of not less than eight weeks is regarded as absolutely necessary by some prominent physicians.

18. In no case of death from contagious disease should a public funeral be held, but the body should be buried without delay and as few persons as possible should attend. In cases of Scarlet Fever, Small-pox, Diphtheria and Cholera, the body should be treated as recommended in Sec. 20. When the very desirable precaution of using sawdust to fill up the coffin is employed, it should be well moistened with a strong solution of corrosive sublimate, or carbolic acid, or mixed with a large quantity of chloride of lime.

19. After the termination of the case, the contents of the room should be disinfected in the modes already described. The room itself should also be thoroughly disinfected ; the ceiling, walls and floor carefully brushed and the sweepings dealt with as before recommended. The room should then be exposed to the fumes of chlorine, or to the fumes of burning sulphur for a period varying from six to twenty-four hours.* For the benefit of patients suffering from Diphtheria, and as a prophylactic in the case of attendants, an unceasing supply of carbolized steam from a shallow basin over a small coal oil stove is of very great service.

20. The following Disinfectants and methods of using them are recommended by a select committee of the American Public Health Association :—

FOR EXCRETA.

(a) In the sick room :

For spore containing material ;

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1 : 500. †

* To prepare chlorine fumes: Mix in a glazed dish and place on a stove or other heating surface, peroxide of manganese, 1 part ; sulphuric acid, 2 ; chloride of sodium, 3 ; water, 2 ; or more easily by mix^{fg} 3 lbs. of chloride of lime and 3 lbs. of hydrochloric acid, for every 1,000 cubic feet of space.

To prepare sulphur fumes: Place a metallic dish, containing hot ashes, on some support in a pan of water, or place in an old pan or other vessel a bed of ashes at least 6 inches deep and about 15 inches in diameter, and place the sulphur and saltpetre in a slight depression in the centre and ignite. The proper proportions are 3 lbs. of sulphur and 3 oz. of saltpetre per 1,000 cubic feet of air space. All doors, windows, and other openings should be tightly closed before the sulphur and saltpetre are ignited.

† The addition of an equal quantity of potassium permanganate as a deodorant, and to give colour to the solution, is to be recommended (*Standard Solution No. 2.*)

In the absence of spores;

3. Carbolic acid in solution, 5 per cent.
4. Sulphate of copper in solution, 5 per cent.
5. Chloride of zinc in solution, 10 per cent.

(b) In privy vaults:

Mercuric chloride in solution, 1 : 500.*

(c) For the disinfection and deodorization of the surface of masses of organic material in privy vaults, etc. :

Chloride of lime in powder.†

FOR CLOTHING, BEDDING, ETC.

(a) Soiled under-clothing, bed linen, etc. :

1. Destruction by fire, if of little value.
2. Boiling for at least half an hour.
3. Immersion in a solution of mercuric chloride of the strength of 1 : 2000 for four hours.‡
4. Immersion in a two per cent. solution of carbolic acid for four hours.

(b) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water or in a disinfecting solution :

1. Exposure to dry heat at a temperature of 110° C. (230° Fahr.) for two hours.
2. Fumigation with sulphurous acid gas for at least twelve hours, the clothing being freely exposed, and the gas present in the disinfection chamber in the proportion of four volumes per cent.

(c) Mattresses and blankets soiled by the discharges of the sick :

1. Destruction by fire.

* A concentrated solution containing four ounces of mercuric chloride and one pound of cupric sulphate to the gallon of water is recommended as a *standard solution*. Eight ounces of this solution to the gallon of water will give a dilute solution for the disinfection of excreta, containing about 1 : 500 of mercuric chloride and 1 : 125 of cupric sulphate.

† For this purpose the chloride of lime may be diluted with plaster of Paris, or with clean, well-dried sand, in the proportion of one part to nine.

‡ The blue solution containing sulphate of copper, diluted by adding two ounces the concentrated solution to a gallon of water, may be used for this purpose.

2. Exposure to super-heated steam—25 lbs. pressure—for one hour.
(Mattresses to have the cover removed or freely opened.)
3. Immersion in boiling water for one hour.
4. Immersion in the blue solution (mercuric chloride and sulphate of copper) two fluid ounces to the gallon of water.

FURNITURE AND ARTICLES OF WOOD, LEATHER AND PORCELAIN.

Washing, several times repeated, with :

1. Solution of mercuric chloride 1 : 1000. (The blue solution, four ounces to the gallon of water, may be used.)
2. Solution of chloride of lime, 1 per cent.
3. Solution of carbolic acid, 2 per cent.

FOR THE PERSON.

The hands and general surface of the body of attendants, of the sick, and of convalescents at the time of their discharge from hospital :

1. Solution of chlorinated soda diluted with nine parts of water (1 : 10.)
2. Carbolic acid, 2 per cent. solution.
3. Mercuric chloride, 1 : 1000; recommended only for the hands, or for washing away infectious material from a limited area, not as a bath for the entire surface of the body.

FOR THE DEAD.

Envelope the body in a sheet thoroughly saturated with :

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1 : 500.
3. Carbolic acid in solution, 5 per cent.

FOR THE SICK ROOM AND HOSPITAL WARD

(a) While occupied, wash all surfaces with :

1. Mercuric chloride in solution, 1 : 1000, (the blue solution containing sulphate of copper may be used.)
2. Chloride of lime in solution, 1 per cent.
3. Carbolic acid in solution, 2 per cent.

(b) When vacated :

Fumigate with sulphur dioxide for 12 hours, burning 3 pounds of sulphur for every 1000 cubic feet of air space in the room ; then wash all surfaces with one of the above-mentioned disinfecting solutions, and afterwards with soap and hot water; finally throw open doors and windows and ventilate freely.

DUTIES OF MUNICIPAL AUTHORITIES.

(See Public Health Acts, 1884, 1885, 1886 and Abstract of Vaccination Acts, R. S. O. and 1886.)

21. Every Municipal Council which has not already complied with sec. 12 of the Public Health Act of 1884, should at once organize a Local Board of Health, and carry out the by-laws contained in the Act (1884), or others equally efficacious, with regard to the removal of all kinds of filth, the protection of water, food and air.

22. The Local Board of Health should issue and enforce directions for the immediate reporting of all cases of infectious diseases, in compliance with the Public Health Acts of 1884 and 1885.

23. On receipt of any such report, the Local Board of Health should, through its Medical Health Officer, immediately enquire into the correctness of it. Upon verification of the report the Board should secure the isolation of those sick with or exposed to the disease and give notice of infected places. They should also regulate funerals of persons dead from infectious diseases ; disinfect rooms, clothing and premises ; and give certificates of recovery and of freedom from liability to communicate the disease. These will be found practicable by enforcing the following clauses of the Health Acts :

No Householder in whose dwelling there occurs any of the above mentioned diseases, shall permit any person suffering from any such disease, or any clothing or other property to be removed from his house, without the consent of the Board or of the Medical Health Officer or attending physician, and the said Board, or Medical Health Officer, or attending physician shall prescribe the conditions of such removal. (Cap. 38, sec. 47, 1884.)

No Person Sick with any of the diseases above specified shall be removed at any time except by permission and under direction of the Board of Health, or Medical Health Officer, or attending physician, nor shall any occupant of any house in which there exists any of the above diseases, except typhoid fever, change his or her residence to any other place without the consent of the Board or of the Medical Health Officer, or attending physician, who shall in either case prescribe conditions, as aforesaid. (Cap. 38, sec. 48, 1884.)

When the Small-pox, Scarlet Fever, Diphtheria, Cholera, or any other contagious disease, dangerous to the public health, is found to exist in any municipality, the health officers or Local Board of Health shall use all possible care to prevent the spreading of the infection or contagion, and shall give public notice of infected places by such means as, in their judgment, is most effective for the common safety. (Cap. 38, sec. 50, 1884.)

Except the Attending Physician or Clergyman, no person affected with Small-pox, Scarlet Fever, Diphtheria or Cholera, and no person having access to any person affected with any of the said diseases shall mingle with the general public until such sanitary precautions as may be prescribed by the Local Board or attending physician shall have been complied with. (Cap. 38, sec. 51, 1884.)

Persons Recovering from any of the said diseases, and **nurses** who have been in attendance on any person suffering from any such disease, shall not leave the premises till they have received from the attending physician, or Medical Health Officer a certificate that in his opinion they have taken such precautions, as to their persons, clothing, and all other things which they propose bringing from the premises, as are necessary to insure the immunity from infection of other persons with whom they may come in contact, nor shall any such person expose him or herself in any public place, shop, street, inn, or public conveyance without having first adopted such precautions. (Cap. 38, sec. 54, 1884.)

Any Local Board of Health may direct the destruction of any bedding, clothing or other articles, which have been exposed to infection, and **may** give compensation for the same. (Cap. 38, sec. 60, 1884.)

24. Every person known to be sick with any infectious disease should be promptly and effectually isolated from the public. No more persons than are necessary should have charge of the patient, and these should be restricted in their intercourse with other persons. The children of the family and other inmates should be prevented from mingling with others in schools or other places until the period of incubation of the disease shall have passed.*

* The following is taken from School Regulations, approved August 25, 1885:—"No pupil who is affected with or exposed to any contagious disease shall be permitted to attend school until he produces the certificate of a medical man that all danger from his mingling with other pupils, or from his exposure to the disease, has passed away."

25. Notices should be placed on every house in which a case of infectious disease exists, and no unnecessary persons allowed to enter.

26. Boards of Health should have distributed in every house copies of the instructions to householders and private individuals contained in this pamphlet, or others of a similar nature, and should see that the instructions are carried out.

27. In populous municipalities isolation hospitals should be provided just as soon as intelligence is received of the existence of any spreading epidemic disease in the Province ; in the instance of Cholera this should be done as soon as it appears on the continent. (A description of one of the best and cheapest of such hospitals, with an engraving of the same, will be found at the end of this pamphlet.)

28. These hospitals, if happily not required for cases of Cholera will be a useful investment for cases of Small-pox, Scarlet Fever, or Diphtheria, which are constantly occurring.

29. When any of the more virulent infectious diseases, such as Small-pox or Cholera, prevails in a populous district, Reception Buildings should be established for persons not actually attacked with such disease, but who require to be kept under observation lest they should become fresh centres for spreading it. Such persons should there be provided with clean clothing, allowed to prosecute their daily avocations, and kept under observation fourteen days.

30. The Local Board of Health should provide a portable furnace for disinfection, otherwise the infected clothing may become a ready means of spreading the disease.

31. If it be found that carelessness exists in carrying out the precautions recommended regarding funerals, some officer or officers should be detailed by the Local Board of Health to see that they are properly carried out.

32. It must be borne in mind by local authorities that deprivation of the necessities of life and want of medical attendance and medicines favour

the spread of Cholera and other diseases, and increase mortality ; and that such wants are more apt to occur during a time of epidemic, when bread-winners may be prostrated or waiting upon those who are attacked.

33. Local Boards of Health should always be on the alert, without causing unnecessary alarm, for reports of approaching disease, and should promptly notify the Secretary of the Provincial Board of any cases which come to their knowledge. They should also make notes of the source of any case which may occur in their locality, and all other facts likely to be of service in a statistical point of view, or in the future study of the disease, and its prevention or limitation.

DESCRIPTION OF HOSPITALS USED IN CONNECTION WITH THE CANTONAL HOSPITAL AT GENEVA, AND ADAPTED TO THE ISOLATION AND TREATMENT OF CHOLERA, SCARLET FEVER, SMALL-POX, DIPHTHERIA, ETC.

Extracted and Translated by Dr. C. W. Covernton, from the Official Report of a paper read by Professor Jullard, and of the discussion thereon, at the International Congress at Geneva, September, 1882.

"The sleepers and frame generally are of wood, fifteen metres (49 ft. 2 in.) in length and seven (22 ft. 9 in.) in breadth. The flooring is seventy-five centimetres (2 ft. 5 in.) above the ground. The lateral walls are formed by sail-cloth, which can be raised or lowered at will. The floor is of hardwood—tongued and grooved, oiled and waxed. The roof is extensively open its whole length. Each tent contains eight beds. During the night, or when rain falls or the wind is high, the sail-cloths are lowered. During the day they are raised, and the patients are thus surrounded by fresh air. These tents offer the following advantages :—
1st. They supply a very aeration to that which the most perfected system of ventilation can yield. When the sail-cloths are raised, the patients, as I have said, are in the open air, sheltered from the sun by the roof ; when they are lowered, the air penetrates through the meshes of the cloth and escapes by the apertures in the roof. The patients thus breathe always a pure and vivifying air, and the hospital smell, which prevails more or less

in every (other) hospital, is never perceived. * * * 2nd. The abode in these tents is very agreeable, and the patients are more cheerful and happy than in the wards of the hospital. 3rd. They afford an opportunity of completely emptying the wards of the hospital* for nearly half the year, and we have thus in Geneva a summer and winter hospital. This periodical emptying of the (surgical) wards, which thus are unoccupied each year between five and six months, and can during that time be thoroughly aired, disinfected and repaired, is a consideration to which I attach the utmost importance as one of the most powerful means of completely purifying and rendering a hospital more healthy : thanks to this system, we are enabled to free ourselves from the hospital gangrene of 1871. Since that period we have not been troubled with any epidemic.

"The only objection that can be urged to these tents or huts is that the patients are exposed to cold and variations of temperature ; but experience has taught us that this fancied objection was not a real one, as I have never noticed any bad results.

* * * *

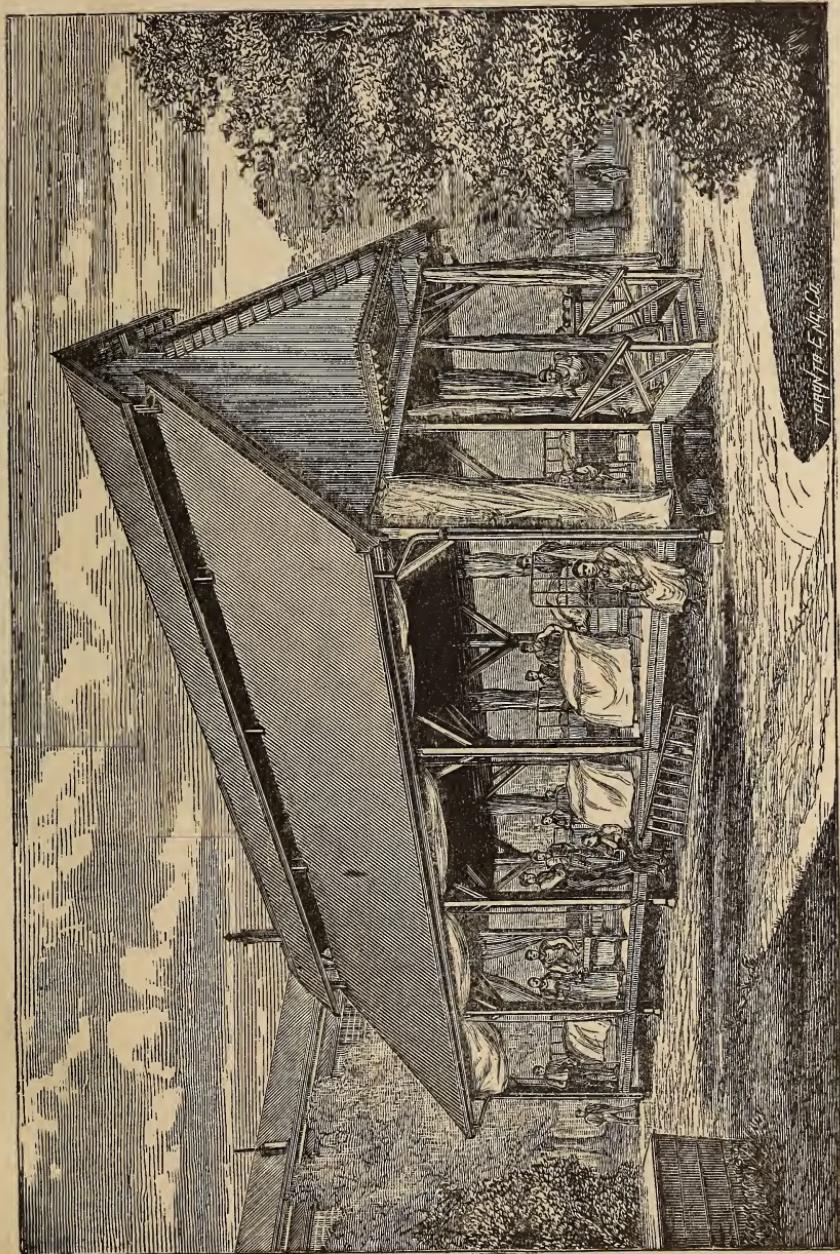
"Dr. Drouineau, Physician to l'Association des dames de la Charente Inferieure, then described the hospital tent employed there, presenting exteriorly the appearance of all huts with tent roofs. An open space, protected on each side by canvas, serves as a walk. The canvas may be raised and the panels of the side walls of canvas removed, and then there remains nothing but the skeleton of the hut, realizing thus the advantages of the cantonal summer wards. But if it is a question of making it available for winter, the canvas walls are replaced, the methods adopted for warming by stoves, or otherwise, employed, and with the double wall of canvas fastened down on the inside, the warmth is increased. Dr. Drouineau considered that when such tents were employed for isolation hospitals for infectious diseases, after thorough disinfection and all practicable precautions taken when the epidemic had ceased, there would be no danger in using them again on the breaking out of other epidemics,

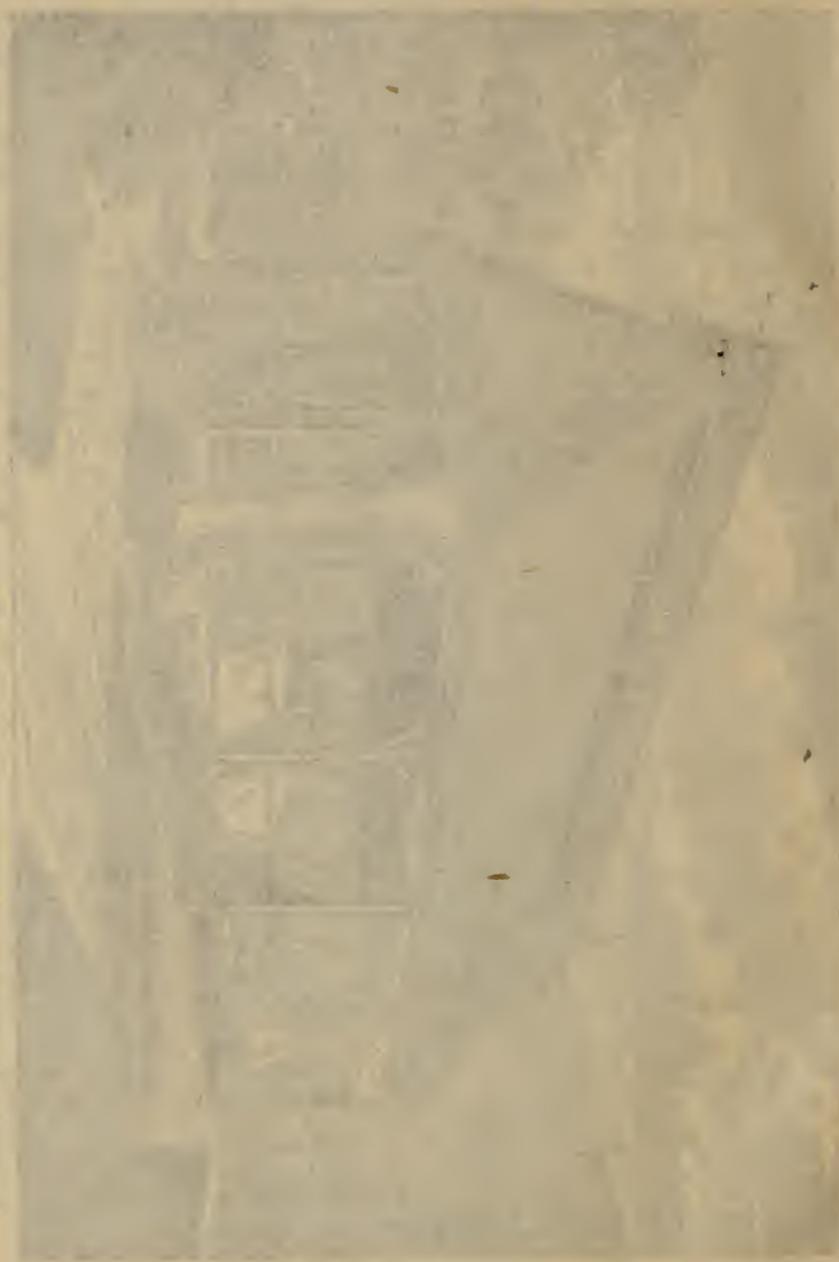
* [Whilst these hospital tents are eminently suited for the treatment of infectious diseases, it must be borne in mind that their use, in the intention of the originators of them, was by no means limited to this class of diseases ; this same kind of building—not the same building, of course—may be used for other forms of disease.]

and thus have on hand fit and economical means for limiting the spread of disease. Dr. Georgevitch, of Belgrade, mentioned that in passing through Vienna he had seen similar hospital tents used by M. Bilroth. He also exhibited the plan of one executed by MM. Volckner and Gruber for the Government of Servia."

At the Provincial Exhibition and at the Toronto Industrial Exhibition, a portable structure was exhibited as a model for an Isolation Hospital. It differs somewhat from the Geneva Hospital: the sail-cloth which, when required, closes in the sides, is stretched on frames, revolving on horizontal pivots. These frames can be more readily and closely adjusted than loose sail-cloth in the form of curtains; and they may be utilized as sloping shades to protect from sun and rain, without closing the openings at the sides.

CANTONAL HOSPITAL AT GENEVA, VISITED BY THE DELEGATES TO THE INTERNATIONAL CONGRESS,
(Engraved from a Photograph contained in the Official Report.)







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